

# Crafton Hills College - Outcomes Assessment Report

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Course: CHEM 151 (General Chemistry II)

Term:  
Date: XXXX

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## 1. Learning Outcomes Statement

1. The ability to apply mathematics to chemical measurements.
2. The ability to do problems involving equilibrium and kinetics.
3. Comprehension and use of laboratory skills in synthetic, quantitative and instrumental methods as scientific approaches to gathering and verifying knowledge.
4. Critical thinking in chemistry including interpretation, evaluation, explanation and critical inquiry; how to ask appropriate questions, gather relevant information efficiently and creatively, sort through this information, reason logically from this information and come to reliable and trustworthy conclusions.
5. The ability to collect, analyze, and articulate results clearly and effectively in speech and in writing in an acceptable style of presentation. The ability to follow directions given both in written and verbal form.

Specific Outcomes assessed for the data presented	SLO measured
Solve activation energy problems	1,2,4
Solve Buffer calculations	1,2,4
Solve equilibrium calculations	1,2,4
Solve integrated rate law problems	1,2,4
Solve acid/base titration – pH calculations	1,2,4
Laboratory assessment such as laboratory skills, and reports	3,5

## 2. Means of Assessment (Measurement Method)

5-question test

## 3. Criteria for Success (Benchmark)

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## 4. Summary of Evidence

CHEM 151 is the second semester of a two semester course. All students from spring 2008 – spring 2012 correctly answered at least 3 of the five questions assessed. We have seen an increase in the success of

our students overall.

*5. Use of Results (Implications for Program Improvement & Planning)*

To better help students with laboratory skills and reports (SLOs 3 & 5), new experiments have been written and implemented using an electronic data collection system that is used with computers. Results of these changes will be assessed once more data can be collected.